

Lead

Lead is a chemical element with the symbol Pb and an atomic number of 82. Lead is a soft and malleable heavy metal denser than most common materials. Lead is silvery with a hint of blue. However, it tarnishes to a dull gray color when exposed to air.



Lead as a Hazard

Lead poisoning symptoms may occur slowly and can be overlooked. Exposure to high levels of lead may cause anemia, weakness, kidney damage, and brain damage. Very high lead exposure can cause death. With the symptoms of lead occurring slowly, it is important to ensure workers receive periodic medical examinations if they work removing lead. This will help determine if your control measures are effective and to monitor the health of your staff, ensuring they are not suffering from the effects of lead exposure.

When dealing with lead, it does not matter if a person inhales, swallows, or absorbs lead particles. The health effects are the same. However, the body absorbs higher levels of lead when it is inhaled.

Lead can be found in the following materials, among many other sources:

- Acoustic dampening baffles
- Additive in brass and other alloys
- Batteries
- Cable and wire casing
- Cast iron pipes, gaskets, and connections

- Solder (plumbing and electrical)
- Indoor firing ranges
- Decorative pieces
- Flashing
- Glazing
- Lead glass, stained glass
- Late 19th and early 20th century tinted mortar for stone cladding
- Paint and surface coatings
- Radiation shielding (bricks or sheeting)
- Structural steel primer

Recommended PPE to prevent contamination includes, but is not limited to:

- Coveralls or full-body work clothing,
- Gloves (ensure proper rating for application)
- Hard Hats
- Protective footwear
- Safety glasses, face shields or goggles
- Air purifying or supplied air respiratory protection
 - a. Ensure N100, R100 or P100 filters are used
 - b. Fit testing must be conducted on these tight seal respirators

If demolition is in your scope of work, it is always best to test. An assessment of the building done by a competent person is the best way to ensure the safety of the workers and the surrounding community.



Sources:

https://www.ccohs.ca/oshanswers/chemicals/lead_construction.html
https://www.ccohs.ca/oshanswers/chemicals/chem_profiles/lead.html
<https://www.cdc.gov/niosh/topics/lead/health.html>
https://d12oja0ew7x0i8.cloudfront.net/image-handler/ts/20220406124148/ri/850/src/images/Article_Images/ImageForArticle_17862_4465702903373844750.jpg

Tool Box Talk

When accidents and incidents happen on the jobsite, we are always quick to point the finger at lack of training, not following practices or procedures, or even improper supervision. The idea that the hazards and dangers associated with the job were not properly communicated to all of the workers is often missed.

Tool Box Talks can go by many names, and although formats may vary, these meetings all serve one purpose: to inform employees and contract workers. Tool Box Talks are short, informal, meetings between management and the workers on a jobsite. The goal of these meetings is to reinforce current safe job procedures, inform workers of new and/or relevant procedures, review recent safety violations/incidents, and ensure workers are up-to-date on the information required to complete their work safely.

Always use a Tool Box Talk form to record the meeting topic, date, who was in attendance, and any follow-up actions to be taken. Not only do these forms help with consistency of record keeping, but they also ensure that nothing is missed. At the end of the meeting have management sign off on the form.

One of the most important aspects of a Tool Box Talk is giving workers an opportunity to voice their concerns and ask questions. All employees have a right to participate in health and safety as it relates to their work and it is the supervisor or manager's responsibility to create an environment for them to do so. Once the meeting is over, and the form is filled out, it should be filed with other documented Tool Box Talks.

Remember that Tool Box Talks are short and informal, they are not meant to be intimidating. Use the opportunity to have fun and stay on top of what is necessary to keep safety culture a strong part of the business.

For a full listing of Tool Box Talk topics, visit: www.scsaonline.ca/resources/tool-box-talks

For a copy of the Tool Box Talk form, visit: www.scsaonline.ca/pdf/Tool_Box_Meeting.pdf

About the Saskatchewan Construction Safety Association

The Saskatchewan Construction Safety Association (SCSA) is an industry-funded, membership-based, nonprofit organization that provides cost-effective, accessible safety training and advice to employers and employees in the construction industry throughout the province to reduce the human and financial losses associated with injuries. Registered March 20, 1995, the SCSA is, and has been since inception, committed to injury prevention. Serving almost 10,000 member companies with business offices in both Regina and Saskatoon, the major business units of the association are Advisory Services, Business Development, Corporate Services, Program Services and Training. The mission of the SCSA is constructing safety leadership in Saskatchewan and the vision is to create the safest construction environment in Canada.